



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

September 12, 2005

Certified Mail No. 7005 0390 0003 2967 8601

Barney Krueger
Vice President Technical Services
Glanbia Foods, Inc.
1728 South 2300 East
Gooding, ID 83330

RE: Facility ID No. 047-00008, Glanbia Foods, Inc., Gooding
Final Permit Letter

Dear Mr. Krueger:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) Number P-040404 for Glanbia Foods, Inc., in Gooding, in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on February 7, March 16, May 16, and July 12, 2005. This permit is effective immediately. This permit does not release Glanbia Foods, Inc., from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Twin Falls Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "Martin Bauer". The signature is written in a cursive, flowing style.

Martin Bauer, Administrator
Air Quality Division

MB/DM/sd
Enclosures

Permit No. P-040404



Air Quality
PERMIT TO CONSTRUCT
State of Idaho
Department of Environmental
Quality

PERMIT No.: P-040404
FACILITY ID No.: 047-00008
AQCR: 63 **CLASS:** SM
SIC: 2023 **ZONE:** 11
UTM COORDINATE (km): 693.3, 4757.6

1. PERMITTEE

Glanbia Foods, Inc., Gooding Facility

2. PROJECT

PTC Modification – Anaerobic Digester/Biogas-fired Hot Water Boiler and Flare, Revised Process Boiler Emissions Limits

3. MAILING ADDRESS

1728 South 2300 East

CITY

Gooding

STATE

ID

ZIP

83330

4. FACILITY CONTACT

Todd Hughes

TITLE

Environmental Specialist

TELEPHONE

(208) 934-9835

5. RESPONSIBLE OFFICIAL

Barney Krueger

TITLE

Vice President Technical Services

TELEPHONE

(208) 733-7555

6. EXACT PLANT LOCATION

9984.49 Northing, 11442.28 Easting

COUNTY

Gooding

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Cheese and Whey Processing

8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200, et seq.

Barney H. Burnell for

TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: September 12, 2005

Table of Contents

| | |
|---|----|
| ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE..... | 3 |
| 1. PERMIT TO CONSTRUCT SCOPE | 4 |
| 2. BIOGAS FLARE AND AUXILIARY BOILER | 6 |
| 3. PROCESS BOILERS..... | 11 |
| 4. SUMMARY OF EMISSIONS LIMITS..... | 14 |
| 5. PERMIT TO CONSTRUCT GENERAL PROVISIONS | 15 |

Acronyms, Units, and Chemical Nomenclature

| | |
|-----------------------|---|
| AQCR | Air Quality Control Region |
| CFR | Code of Federal Regulations |
| DEQ | Department of Environmental Quality |
| EPA | U.S. Environmental Protection Agency |
| gal/mo | gallons per month |
| gal/yr | gallons per any consecutive 12-month period |
| gr/dscf | grains (1 lb = 7,000 grains) per dry standard cubic foot |
| H₂S | hydrogen sulfide |
| IDAPA | a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act |
| km | kilometer |
| lb/day | pounds per day |
| lb/million Btu | pounds per million British thermal units |
| MMBtu/hr | million British thermal units per hour |
| NAAQS | National Ambient Air Quality Standards |
| NSPS | New Source Performance Standards |
| O&M | Operations & Maintenance |
| PM | particulate matter |
| PTC | permit to construct |
| SIC | Standard Industrial Classification |
| SO₂ | sulfur dioxide |
| T/yr | tons per year |
| UTM | Universal Transverse Mercator |
| wt % | weight percent |

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

1. PERMIT TO CONSTRUCT SCOPE***Purpose***

This permit is being issued for the following purposes:

- 1.1 This permit allows for the construction and operation of a biogas flare and a biogas/natural gas-fired hot water boiler (auxiliary boiler) used to heat the influent wastewater for a process wastewater anaerobic digester. The flare and the auxiliary boiler, when combusting biogas, control emissions from a wastewater treatment facility anaerobic digester system.
- 1.2 This permit revises the facility's existing permit, PTC No. 047-00008, issued May 7, 2000, which regulates the operations of four process boilers at the facility to maintain the facility's synthetic minor status and SO₂ NAAQS compliance. Distillate fuel oil is the backup fuel for the process boilers. This revision reduces the amount of distillate fuel oil allowed to be combusted in the boilers annually and reduces the sulfur content limit of the distillate fuel oil to 0.05 wt%. These reductions are required to retain the facility's synthetic minor status and SO₂ NAAQS compliance.
- 1.3 The following is a chronological history of permits issued at this facility, the terms and conditions of which shall no longer apply:
 - PTC No. 047-00008, issued May 7, 2000, for a facility name change from Avonmore West, Incorporated, to Glanbia Foods, Inc., and the operation of the four existing process boilers
 - PTC No. 047-00008, issued August 2, 1996, to Avonmore West, Incorporated, for a facility expansion and facility-wide #2 distillate fuel oil combustion limit
 - PTC No. 047-00008, issued June 6, 1994, to Avonmore West, Incorporated, added NSPS Subpart Dc emissions standards and removed performance testing requirements for the 600 horsepower Cleaver Brooks boiler
 - PTC No. 047-0008, issued June 6, 1994, to Avonmore West, Incorporated, for the installation of a 600 horsepower Cleaver Brooks boiler

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this PTC.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

TABLE 1.1 REGULATED EMISSIONS SOURCES

| Permit Section | Source Description | Emissions Control(s) |
|----------------|---|---|
| 2 | <u>Anaerobic digester</u> | Biogas flare (Flr 1) Manufacturer: Varec Biogas Model: No. 244 W Rated Heat Input Capacity: 11.75 MMBtu/hr Date of Installation: 2005 |
| 2 | Auxiliary Boiler (Blr 5) Manufacturer: Cleaver Brooks Model No.: CB700-400-30H Rated Heat Input Capacity: 16.73 MMBtu/hr Fuels: Biogas and/or natural gas Date of Installation: 2005 | None (considered an emission control device when combusting biogas) |
| 3 | Process Boilers Boiler 1 (Blr 1) Rated Heat Input Capacity: 29.35 MMBtu/hr Manufacturer: Continental Model No.: E Series, E162A700C-7685-G2A Fuel: Natural gas exclusively Date of Installation: July 1979 | None |
| | Boiler 2 (Blr 2) Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-90943 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: July 1992 | Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit |
| | Boiler 3 (Blr 3) Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79896 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: December 1996 | Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit |
| | Boiler 4 (Blr 4) Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79895 Fuels: Natural gas exclusively Date of Installation: December 1999 | None |

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

2. BIOGAS FLARE AND AUXILIARY BOILER**2.1 Process Description**

Process water used for processing cheese and cheese whey is treated by screening, clarifying, and settling of the water. An anaerobic digester is used to further treat the water prior to discharging to land application. The digester generates biogas that is burned in a biogas/natural gas-fired hot water boiler (auxiliary boiler or Blr 5). In the event the auxiliary boiler is not capable of burning the biogas, it is incinerated by a flare. The auxiliary boiler is used to heat the influent wastewater. The biogas is either burned in the auxiliary boiler or the flare. If not enough biogas is available to fire the auxiliary boiler, natural gas is used as the fuel for the auxiliary boiler and all the biogas is burned in the flare. The pilot light for the flare is only operated intermittently when the biogas pressure drops below a certain level.

The flare incinerates biogas exclusively and has a natural gas-fired pilot flame. The auxiliary boiler is fired on biogas and natural gas exclusively. The flare and the auxiliary boiler are not fired on biogas simultaneously.

2.2 Emissions Control Description

Emissions from the anaerobic digester are controlled either by an auxiliary boiler or a biogas flare.

TABLE 2.1 BIOGAS FLARE DESCRIPTION

| Emissions Unit(s) / Process(es) | Emissions Control Device |
|--|--|
| Anaerobic digester | Blr 5 - Biogas-fired auxiliary hot water boiler Manufacturer: Cleaver Brooks Model No.: CB700-400-30H Rated Heat Input Capacity: 16.73 MMBtu/hr Fuels: Biogas and/or natural gas |
| | Flr 1 - Biogas-fired flare Manufacturer: Varec Biogas Model: No. 244 W Rated Heat Input Capacity: 11.75 MMBtu/hr |

Emissions Limits**2.3 Emissions Limits****2.3.1 SO₂ Emission Limit**

The total SO₂ emissions from the auxiliary boiler stack and the biogas flare shall not exceed 30.1 tons per any consecutive 12-month period (T/yr).

2.3.2 H₂S Emissions Limits

- Emissions of H₂S from the biogas flare shall not exceed 8.66 lb/day.
- Emissions of H₂S from the biogas flare shall not exceed 1.58 T/yr.
- Emissions of H₂S from auxiliary boiler stack shall not exceed 1.73 lb/day, while combusting biogas.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

- Emissions of H₂S from auxiliary boiler stack shall not exceed 0.32 T/yr, while combusting biogas.

2.4 Opacity Limit

Emissions from the biogas flare or from the auxiliary boiler stack, or any other stack, vent, or functionally equivalent opening associated with the flare or auxiliary boiler, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.5 Auxiliary Boiler Grain Loading Limit

The permittee shall not discharge to the atmosphere from the auxiliary boiler stack PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, as required by IDAPA 58.01.01.676.

2.6 Biogas Flare Particulate Matter Emissions Limit

Particulate matter emissions from the biogas flare shall not exceed 0.2 pounds per 100 pounds of biogas burned, as required by IDAPA 58.01.01.785.

2.7 Rules for the Control of Odors

The permittee shall not allow, suffer, cause or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution, as required by IDAPA 58.01.01.776.01.

Operating Requirements

2.8 Requirements to Install Flare and to Combust Digester Emissions

The permittee shall install, calibrate, maintain, and operate a flare for the combustion of the biogas emitted from the anaerobic digester. All emissions of air pollutants from the anaerobic digester shall be combusted in either the auxiliary boiler or the flare.

2.9 Pilot Flame and Alarm

The flare shall be operated with a pilot flame present during the operation of the digester. In the event of a flame failure, the permittee shall follow a standard operating procedure to reinitiate the pilot flame as expeditiously as practicable.

Within 60 days of issuance of this permit, the permittee shall install a thermocouple or similar device that detects the presence of a flame in the biogas flare. This device shall be periodically calibrated and shall be operated at all times when the flare is operating. In addition, the permittee shall install an alarm that notifies the operator in the case of a flameout within 60 days of issuance of this permit. The permittee shall follow the excess emissions procedures in IDAPA 58.01.01.130-136 in the event of an excess emissions event caused by the biogas flare.

2.10 Concurrent Operation of the Flare and the Auxiliary Boiler

The flare and the auxiliary boiler shall not operate concurrently while combusting biogas.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

Monitoring, Recordkeeping, and Reporting Requirements

2.11 NSPS-Subpart Dc Applicability Notification, Monitoring, Reporting and Recordkeeping Requirements (Auxiliary Boiler)

In accordance with 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup as required by 40 CFR 60.7 for the auxiliary boiler.

The notification shall include the following:

- the design heat input capacity of the affected facility,
- fuels to be combusted in the affected facility,
- the annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each fuel fired.

The monitoring and recordkeeping of fuels combusted in the auxiliary boiler shall comply with 40 CFR 60.48c(g):

- The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day, unless alternative monitoring, recordkeeping, and reporting is formally approved by EPA.
- The permittee shall maintain written documentation of any EPA-approved monitoring, recordkeeping, and reporting requirements for the auxiliary boiler.

2.12 Biogas Flow and H₂S Concentrations Monitoring

Unless an alternative monitoring and recordkeeping method is approved by DEQ, the permittee shall comply with the following requirements:

For the hydrogen sulfide analyzer and the totalizing gas flow rate analyzer upstream of the auxiliary boiler and the biogas flare, the permittee shall install, calibrate, maintain, operate, and record parameters in accordance with the O&M manual and the requirements listed below:

Biogas H₂S Concentration

The permittee shall perform the following to determine the quantity of H₂S produced by the anaerobic digester:

- Calibration of the hydrogen sulfide analyzer shall be performed and recorded semi-annually.
- An H₂S sample shall be taken and analyzed by the hydrogen sulfide analyzer, and the H₂S concentration results recorded, at least once per week. If additional H₂S samples are taken, those shall also be recorded.

Biogas Generation

The permittee shall perform the following to determine the quantity of biogas produced by the anaerobic digester:

- Once per month, the total gas flow shall be recorded.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

H₂S and SO₂ Emission Estimates

The permittee shall estimate H₂S and SO₂ emissions according to the following methods:

- The monthly SO₂ emissions and H₂S emissions from the flare and the auxiliary boiler shall be calculated using the average H₂S concentration readings of all H₂S samples taken for each month, and the corresponding monthly biogas flow. The calculations shall be conducted using the same method as in the permit application, including a molar conversion of H₂S to SO₂, a 90% H₂S control efficiency and 90% conversion of H₂S to SO₂ for the flare; and a 98% H₂S control efficiency, and a 100% conversion of H₂S to SO₂ emissions for the auxiliary boiler.
- Monthly SO₂ emissions shall be used to determine rolling 12-month total SO₂ emissions.
- Monthly H₂S emissions shall be used to determine rolling 12-month H₂S emissions.

2.13 Operations and Maintenance Manual

Within 60 days of start-up of the digester, the permittee shall develop an operations and maintenance (O&M) manual which describes the procedures that will be followed to maintain good working order and assure operation as efficiently as practical for the H₂S monitor and the pilot flame detector. The procedures and specifications described in the O&M manual shall address, at a minimum, the following topics:

H₂S Monitor

- Standard operational procedure for H₂S sampling
- Frequency and method of calibration
- Operational maintenance
- Procedures for upset/breakdown conditions and for correcting equipment malfunctions

Pilot Flame Detector

- Method of ensuring continuous operation
- Operational maintenance

Within 60 days of start-up of the digester, a copy of the O&M manual shall be submitted to the DEQ Twin Falls Regional Office at the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Twin Falls Regional Office
601 Pole Line Road, Suite 2
Twin Falls, Idaho 83301
Phone: (208) 736-2190

Fax: (208) 736-2194

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

2.14 Recordkeeping Requirement

A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

3. PROCESS BOILERS**3.1 Process Description**

Four existing boilers provide steam and hot water to the manufacturing processes at the facility. Two boilers combust natural gas exclusively. Two boilers are dual-fuel boilers and are permitted to combust either natural gas or up to 387,258 gallons per year of low sulfur distillate fuel oil individually or collectively.

3.2 Emissions Control Description

Emissions from the existing process boilers are uncontrolled.

TABLE 3.1 PROCESS BOILER DESCRIPTION

| Emissions Unit(s) / Process(es) | Emissions Control Device |
|---|--|
| <u>Boiler 1 (Blr 1)</u> Rated Heat Input Capacity: 29.35 MMBtu/hr Manufacturer: Continental Model No.: E Series, E162A700C-7685-G2A Fuel: Natural gas exclusively Date of Installation: July 1979 | None |
| <u>Boiler 2 (Blr 2)</u> Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-90943 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: July 1992 | Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit |
| <u>Boiler 3 (Blr 3)</u> Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79896 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: December 1996 | Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit |
| <u>Boiler 4 (Blr 4)</u> Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79895 Fuels: Natural gas exclusively Date of Installation: December 1999 | None |

Emissions Limits**3.3 Process Boiler Stack Emissions****3.3.1 Particulate Matter Emissions**

Particulate matter emissions from any process boiler stack shall not exceed 0.05 gr/dscr of effluent gas corrected to 3% oxygen by volume when combusting liquid fuel, nor shall PM emissions from any process boiler stack exceed 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume when combusting gas.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

3.3.2 NSPS—Subpart Dc Sulfur Dioxide Emission Standard

Sulfur dioxide (SO₂) emissions from any oil-fired process boiler stack not exceed 0.5 lb/MMBtu heat input, as required in 40 CFR 60.42.c(d), or as an alternative, the sulfur content in any oil combusted in any oil-fired process boiler shall not be greater than 0.5 wt%.

3.3.3 Annual Sulfur Dioxide Emission Limit

Aggregated annual emissions of SO₂ from Boilers 2 and 3 shall not exceed 1.4 T/yr while combusting distillate fuel oil.

3.4 Visible Emissions Limit

Emissions from each process boiler stack, or any other stack, vent, or functionally equivalent opening associated with each process boiler, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

3.5 Allowable Fuel Types

- Boilers 1 and 4

Boilers 1 and 4 shall combust natural gas exclusively.

- Boilers 2 and 3

Boilers 2 and 3 shall combust either natural gas or low sulfur distillate fuel oil.

3.6 Distillate Fuel Oil Throughput Limit

The total throughput of low sulfur distillate fuel oil combusted either individually or aggregated in Boilers 2 and 3 shall not exceed 387,258 gallons per any consecutive 12-month period.

3.7 Distillate Fuel Oil Sulfur Content Limit

The sulfur content of any distillate fuel oil combusted in Boilers 2 and 3 shall not exceed 0.05 wt%.

3.8 Rules for the Control of Open Burning

The permittee shall comply with the provisions of IDAPA 58.01.01.600-617 to protect public health and welfare from air pollutants resulting from open burning.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

Monitoring, Recordkeeping and Reporting Requirements**3.9 Distillate Fuel Oil Combustion Monitoring**

The permittee shall monitor and record the throughput of distillate fuel oil combusted in Boilers 2 and 3 monthly and annually, expressed as gallons per month (gal/mo) and gallons per year (gal/yr), to demonstrate compliance with Permit Condition 3.6. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period.

3.10 NSPS-Subpart Dc Distillate Fuel Oil Sulfur Content Monitoring, Recordkeeping and Reporting Requirements (Boilers 2 and 3)

The permittee shall comply with the following requirements for Boilers 2 and 3, in accordance with 40 CFR 60.42c(h):

- The permittee shall demonstrate compliance with the fuel oil sulfur content limits specified in Permit Condition 3.7 and 40 CFR 60.42c(d) by complying with 40 CFR 60.48c(d), CFR 60.48c(e), and 40 CFR 60.48c(f).
- Records of each fuel oil sulfur content certification shall remain onsite for the most recent two-year period in accordance with 40 CFR 60.48c(i), and shall be made available to DEQ representatives upon request.
- Semi-annual reports shall be submitted to EPA Region 10 in accordance with 40 CFR 60.48c(j).

3.11 NSPS-Subpart Dc Applicability Notification, Monitoring, Reporting and Recordkeeping Requirements (Boilers 2, 3, and 4)

In accordance with 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup as required by 40 CFR 60.7 for Boilers 2, 3, and 4.

The notification shall include the following:

- the design heat input capacity of the affected facility,
- fuels to be combusted in the affected facility,
- the annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each fuel fired.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

4. SUMMARY OF EMISSIONS LIMITS

Table 4.1 provides a summary of all emissions limits required by this permit:

TABLE 4.1 SUMMARY OF EMISSIONS LIMITS

| Glanbia Foods, Inc., Gooding Emissions Limits ^a - Annual ^b (T/yr) | | | |
|--|------------------|------|-----------------|
| Source Description | H ₂ S | | SO ₂ |
| | lb/day | T/yr | T/yr |
| Biogas Flare | 8.66 | 1.58 | 30.1 |
| Auxiliary Boiler 5 | 1.73 | 0.32 | |
| Boiler 2 | NA ^c | NA | 1.4 |
| Boiler 3 | NA | NA | |

^a As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

^b As determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates. The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

^c Not applicable to this emissions unit

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

5. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the *Rules for the Control of Air Pollution in Idaho*. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq., and the permittee is subject to penalties for each day of noncompliance.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within five working days after occurrence:
 - Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. If compliance testing is specified, the permittee must schedule and perform such testing within 60 days after achieving the maximum production rate, and not later than 180 days after initial startup. This requirement shall be construed as an ongoing requirement. The permittee shall not operate the source without testing within 180 days. If testing is not conducted within 180 days after initial startup, then each day of operation thereafter without the required compliance test constitutes a violation. Such testing must **strictly** adhere to the procedures outlined in IDAPA 58.01.01.157 and shall not be conducted on weekends or state holidays without prior written approval from DEQ. Testing procedures and specific time limitations may be modified by DEQ by prior negotiation if conditions warrant adjustment. DEQ shall be notified at least 15 days prior to the scheduled compliance test. Any records or data generated as a result of such compliance test shall be made available to DEQ upon request.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040404

| | | | | |
|-------------------|---------------------|----------------------------------|---------------------|--------------------|
| Permittee: | Glanbia Foods, Inc. | Facility ID No. 047-00008 | Date Issued: | September 12, 2005 |
| Location: | Gooding, Idaho | | | |

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.